ebstitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 9

	Complete if Known	
Application Number	10/087,153	
Filing Date	February 28, 2002	
First Named Inventor	PAVLOVSKAIA, ELENA	
Art Unit	3732	
Examiner Name	MANAHAN, TODD E.	
Attorney Docket Number	018563-002910US	

			U.S. PATENT DO	CUMENTS+	
		Document Number			
Examiner initials*	Cite No. ¹	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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<i>7////</i>	/ 1	EP	0091876	A1_	10-19-1983	Duret		X
700	2	EP	0299490	A2	01-18-1989	Steinbichler et al.		Ø
\Box	3	EP	0376873	A2	07-04-1990	Shafir		
\Box	4	EP	0490848	A2	06-17-1992	Nobelpharma AB.		
	5	EP	0541500	A1	06-12-1998	Nobelpharma AB		
	6	EP	0731673	B1	09-18-1998	Andersson et al.		
	7	EP	0774933	B1	05-28-1997	Oden et al.		
	8	FR	2652256	A1	03-29-1991	Jourda		X
	1 9	FR	2369828	A1	06-02-1978	Suyehiro		X
	10	wo	90/08512	A1·	08-09-1990	Dolphin Imaging Systems		
	11	wo	91/04713	A1	04-18-1991	Jourda et al.		
	12	wo	94/10935	. A1	05-26-1994	Ormco Corporation		
1/1	13	WO	98/44865	A1	10-15-1998	Nobel Biocare		
	14	WO	98/58596	A1	12-30-1998	Align Technology		

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			01 001105	Application Number	10/087,153
			CLOSURE	Filing Date	February 28, 2002
STAT	EMENT E	BY A	PPLICANT	First Named Inventor	PAVLOVSKAIA, ELENA
				Art Unit	3732
(4	ise as many sh	reets as	necessary)	Examiner Name	MANAHAN, TODD E.
Sheet	2	of	9	Attomey Docket Number	018563-002910US

	/	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
//#	15	ALEXANDER et al., "The DigiGraph Work Station Part 2, Clinical Management," JCO (July 1990), pp. 402-407.	
	16	ALTSCHULER et al, "Measuring Surfaces Space-Coded by a Laser-Projected Dot Matrix," SPIE Imaging Applications for Automated Industrial Inspection and Assembly, vol. 182 (1979), p. 187-191.	
	17	ALTSCHULER et al., "Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Oral-Facial Structures, "IADR Abstracts, Program and Abstracts of Papers, 57th General Session, IADR Annual Session, March 29, 1979 - April 1, 1979, New Orleans Marriot, Journal of Dental Research, Vol. 58, January. 1979, Special Issue A, p. 221.	
	18	ALTSCHULER et al., "Laser Electro-Optic System for Rapid Three-Dimensional (3D) Topographic Mapping of Surfaces," Optical Engineering, Vol. 20(6) (1981), pp. 953-961.	
	19	ALTSCHULER, "3D Mapping of Maxillo-Facial Prosthesis," AADR Abstract #607,1980, 1 page total	·
	20	American Association for Dental Research, Summary of Activities, March 20-23, 1980, Los Angeles, CA, p. 195.	
	21	ANDERSSON et al., "Clinical Results with Titanium Crowns Fabricated with Machine Duplication and Spark Erosion," <i>Acta Odontological Scandinavia</i> , vol. 47 (1989), pp. 279-286.	
	22	BAUMRIND et al., "A Stereophotogrammetric System for the Detection of Prosthesis Loosening in Total Hip Arthroplasty", NATO Symposium on Applications of Human Biostereometrics, July 9-13, 1978," SPIE Vol. 166, pp. 112-123.	
	23	BAUMRIND et al., "Mapping the Skull in 3-D, Reprinted from The Journal, California Dental Association, Vol. 48, No. 2 (1972 Fall Issue) 11 pages total.	
	24	BAUMRIND, "A System for Craniofacial Mapping Through the Integration of Data from Stereo X-Ray Films and Stereo Photographs," An invited paper submitted to the 1975 American Society of Photogram. Symposium on Close-Range Photogram. Systems, University of Ill., Aug. 26-30, 1975, pp. pp.142-166.	
·	25	BAUMRIND, "Integrated Three-Dimensional Craniofacial Mapping: Background, Principles, and Perspectives," Seminars in Orthodontics, Vol. 7, No. 4 (Dec. 2001), pp. 223-232.	
	26	BEGOLE et al., "A Computer System for the Analysis of Dental Casts," The Angle Orthodontist, Vol. 51 No. 3 (July 1981), pp. 253-259.	
	/ 21	BERNARD et al., "Computerized Diagnosis in Orthodontics for Epidemiological Studies: A Progress Report", Abstracts of Papers, <i>Journal of Dental Research</i> ; Vol. 67, Special Issue March 9-13, 1988, p.169.	
1///	28	BHATIA et al. "A Computer-Aided Design for Orthognathic Surgery," British Journal of Oral and Maxillofacial Surgery, Vol. 22 (1984), pp. 237-253.	
Examiner Signature		Date 12-1-05	

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Sheet	3	of 9	Attorney Docket Number	018563-002910US

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/////	29	BIGGERSTAFF et al., "Computerized Analysis of Occlusion In The Postcanine Dentition," American Journal of Orthodontics, Vol. 61, No. 3 (Mar. 1972), pp. 245-254.	
	30	BIGGERSTAFF, "Computerized Diagnostic Setups and Simulations," The Angle Orthodontist, Vol. 40, No. 1 (Jan. 1970), pp. 28-36.	
	31	BOYD et al., "Three Dimensional Diagnosis and Orthodontic Treatment of Complex Malocclusions Wlith the Invisalign Appliance"," Seminars in Orthodontics, Vol. 7, No. 4 (Dec. 2001), p. 274-293.	
	32	BRANDESTINI et al., "Computer Machined Ceramic Inlays: In Vitro Marginal Adaptation," Journal of Dental Research, Vol. 64/Special Issue/Abstracts, IADR/AADR Abstracts 1985, p. 208	
	33	BROOK et al., "An Image Analysis System for the Determination of Tooth Dimensions from Study Casts: Comparison with Manual Measurements of Mesio-distal Diameter, <i>J Dent Res.</i> , Vol. 65, No. 3, March 1986, pp. 428-431.	
	34	BURSTONE (interview), "Dr. Charles J. Burstone on The Uses of the Computer in Orthodontic Practice (Parts1 and 2)," Journal of Clinical Orthodontics, (Part 1) Vol. 8, No. 7, July 1979; (Part 2) Vol. 8, No. 8 pp. 539-551, Aug. 1979.	
	35	BURSTONE et al., "Precision Adjustment of the Transpalatal Lingual Arch: Computer Arch Form Predetermination," Am. Journal of Orthodontics, Vol. 79, No. 2 (Feb. 1981), pp. 115-133.	
	36	CHACONAS et al., "The DigiGraph Work Station, Part 1, Basic Concepts," JCO (June 1990), pp. 360-367.	
	37	CHAFETZ et al., "Subsidence of the Femoral Prosthesis, A Stereophotogrammetric Evaluation," Clinical Orthopaedics and Related Research, No. 201 (December 1985), pp. 60-67.	
	38	CHIAPPONE, "Constructing the Gnathologic Setup And Positioner" J. Clin. Orthod., 14:121-133, 1980.	
	39	COTTINGHAM, "Gnathologic Clear Plastic Positioner" Am. J. Orthod., Vol. 55, No. 1, (January 1969), pp. 23-31.	
	40	CRAWFORD, "Computers in Dentistry: Part 1: CAD/CAM: The Computer Moves Chairside," "Part 2: F. Duret — A Man With A Vision," "Part 3: The Computer Gives New Vision- Literally," "Part 4: Bytes 'N Bites" The Computer Moves From The Front Desk To The Operatory, Canadian Dental Journal, vol. 54(9), , (1988), pp. 661-666.	
1/1	41	CRAWFORD, "CAD/CAM in the Dental Office: Does It Work?" Canadian Dental Journal, Vol. 57, No. 2 (Feb. 1991), pp. 121-123.	
/////	42	CROOKS, "CAD/CAM Comes to USC," USC Dentistry, (Spring 1990) pp. 14-17.	

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	Examiner Signature		12-1-09

EXAMINER: Initial/if prevence consistered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant.

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Substitute for form 1449B/PTO Complete if Known 10/087,153 **Application Number** INFORMATION DISCLOSURE Filing Date February 28, 2002 STATEMENT BY APPLICANT PAVLOVSKAIA, ELENA First Named Inventor Art Unit 3732 (use as many sheets as necessary) Examiner Name MANAHAN, TODD E. 018563-002910US of 9 Attorney Docket Number Sheet

		NON PATENT LITERATURE DOCUMENTS	_
Examiner	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	7
VIX	43	CURETON, "Correcting Malaligned Mandibular Incisors With Removable Retainers" J. Clin. Orthod., 30:390-395, 1996.	
	44	CURRY et al., "Integrated Three-Dimensional Craniofacial Mapping at the Craniofacial Research Instrumentation Laboratory/University of the Pacific," Seminers in Orthodontics, Vol. 7, No. 4 (Dec. 2001), pp. 258-265.	
	45	CUTTING et al., "Three-Dimensional Computer-Assisted Design of Craniofacial Surgical Procedures: Optimization and Interaction with Cephalometric and CT-Based Models," Plastic and Reconstructive Surgery, Vol. 77, No. 6 (June 1986), pp. 877-885.	
- .	46	DCS Dental AG, "The CAD/CAM 'DCS Titan System' for Production of Crowns/Bridges" DSC Production AG, Jan. 1992, pp. 1-7.	
	47	DEFRANCO et al., "Three-Dimensional Large Displacement Analysis of Orthodontic Appliances," J. Biomechanics, Vol. 9 (1976), pp. 793-801.	
	48	Dental Institute University of Zurich Switzerland, Program for International Symposium on Computer Restorations: State of the Art of the CEREC-Method, May 1991, 2 pages total.	
	49	DenTrac Corporation, Dentrac document, pp. 4-13.	
	50	DURET et al, "CAD-CAM in Dentistry," Journal of the American Dental Association, Vol. 117 (Nov. 1988), pp. 715-720.	
	51	DURET et al., "CAD/CAM Imaging in Dentistry," Current Opinion in Dentistry, Vol. 1 (1991), pp. 150-154.	
	. 52	DURET, "Vers une prosthese informatisee," (English translation also attached), <i>Tonus</i> , vol. 75, (Nov. 15, 1985), pp. 55-57.	Γ
	53	DURET, "The Dental CAD/CAM, General Description of the Project," Hennson International Product Brochure, Jan. 1986., 18 pages total.	
1	54	ECONOMIDES, "The Microcomputer in the Orthodontic Office," JCO, (Nov. 1979), pp. 767-772.	
	55	ELSASSER, "Some Observations on the History and Uses of the Kesling Positioner" Am. J. Orthod., Vol. 36, No. 5, (May1950) pp. 368-374.	·
	56	FABER et al., "Computerized interactive orthodontic treatment planning," Am. J. Orthod., Vol. 73, No. 1 (Jan. 1978), pp. 36-46.	
	57	FELTON et al. "A computerized analysis of the shape and stability of mandibular arch form," Am. Journal of Orthodontics and Dentofacial Orthopedics, Vol. 92, No. 6 (Dec. 1987), pp. 478-483.	
1/11	58	FRIEDE et al., "Accuracy of Cephalometric Prediction in Orthognathic Surgery, "Abstract of Papers, Journal of Bental Research, Vol. 70 (1987), pp. 754-760.	

Date Examiner Considered Signature

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	INFORMATION DISCLOSURE		Application Number	10/087,153				
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STAT	STATEMENT BY APPLICANT		PPLICANT	First Named Inventor	PAVLOVSKAIA, ELENA			
				Art Unit	3732			
(use as many s	heets as	necessary)	Examiner Name	MANAHAN, TODD E.			
Sheet	5	of	9	Attorney Docket Number	018563-002910US			

		NON PATENT LITERATURE DOCUMENTS	
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AM	59	GIM-ALLDENT Deutschland, "Das DUX System: Die Technik" 2 pages total.	
	60	GRAYSON, "New Methods for Three Dimensional Analysis of Craniofacial Deformity," Symposium: Computerized Facial Imaging in Oral and Maxilofacial Surgery Presented on September 13, 1990, AAOMS 72nd Annual Meeting and Scientific Sessions, Sept. 13, 1990, New Orleans, Journal of Oral and Maxillofacial Surgery, Vol. 48, no. 8, Supp. 1, August 1990, p. 5-8.	
	61	GUESS et al., "Computer Treatment Estimates in Orthodontics and Orthognathic Surgery, "JCO, (April, 1989), pp. 262-28.	
	62	HEAVEN et al., "Computer-based Image Analysis of Artificial Root Surface Carles," Abstracts of Papers, Journal of Dental Research, Vol. 70, April 17-21, 1991, p. 528.	
	63	HOFFMANN et al., "Role of Cephalometry for Planning of Jaw Orthopedics and Jaw Surgery Procedures," (Article Summary in English, article in German), Informationen, (March 1991), pp. 375-396.	
	64	HUCKINS, "CAD-CAM Generated Mandibular Model Prototype from MRI Data," AAOMS 1999, p. 96.	
	65	JCO Interviews, "Craig Andreiko , DDS, MS on the Elan and Orthos Systems", JCO, (Aug. 1994), pp. 459-468.	
	66	JCO Interviews, "Dr. Homer W. Phillips on Computers in Orthodontic Practice, Part 2," JCO, (Dec. 1983), pp. 819-831.	
	67	JERROLD, "The Problem, Electronic Data Transmission and the Law," AJO-DO, (Apr. 1988), pp. 478-479.	
	68	JONES et al., "An Assessment of the Fit of a Parabolic Curve to Pre- and Post-Treatment Dental Arches," British Journal of Orthodontics, Vol. 16 (1989), pp. 85-93.	
	69	KAMADA et al., "Case Reports on Tooth Positioners Using LTV Vinyl Silicone Rubber" J. Nihon University School of Dentistry, 26(1):11-29, 1984.	
	70	KAMADA et al., "Construction of Tooth Positioners With LTV Vinyl Silicone Rubber and Some Case Reports" J. Nihon University School of Dentistry, 24(1):1-27, 1982.	
	71	KANAZAWA et al., "Three-Dimensional Measurements of the Occlusal Surfaces of Upper Molars in a Dutch Population," J. Dent Res., Vol. 63, No. 11 (Nov. 1984), pp. 1298-1301.	
1	72	KESLING, "Coordinating the Predetermined Pattern and Tooth Positioner With Conventional Treatment" Am. J. Orthod. Oral. Surg., 32:285-293, 1946.	
7/1	73	KESLING, "The Philosophy of the Tooth Positioning Appliance" Am. J. Orthod. Oral. Surg., 31(6):297-304, 1945.	

Examiner Signature Considered 12-1-09

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Sheet	6	of	9	Attorney Docket Number	018563-002910US	

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1/10	74	KLEEMANN et al., "The Speed Positioner" J. Clin. Orthod., 30:673-680, 1996.	
	75	KURODA et al., "Three-dimensional dental cast analyzing system using laser scanning" Am. J. Orthod. Dentofac. Orthop., 110:365-369, 1996.	
	76	LAURENDEAU et al., "A Computer-Vision Technique for the Acquisition and Processing of 3-D Profiles of Dental Imprints: An Application in Orthodontics," IEEE Transactions on Medical Imaging, Vol. 10, No. 3 (Sept. 1991), pp. 453-461.	
	77	LEINFELDER et al., "A new method for generating ceramic restorations: a CAD-CAM system," Journal Of The American Dental Assoc., Vol. 118, No. 6 (Jun. 1989), pp. 703-707.	
	78	MANETTI et al., "Computer-aided Cefalometry and New Mechanics in Orthodontics" (Article Summary in English, article in German), Fortschr. Kieferorthop. 44, 370-376 (Nr. 5), 1983	
	79	MCCANN, "Dental Technology", Inside the ADA, JADA., Vol. 118 (March 1989) pp. 286-294.	
	80	MCNAMARA et al., "Invisible Retainers", J. Clinical Orthodontics, (August 1985) pp. 570-578.	
	- 81	MCNAMARA et al., Chapter 19: Invisible Retainers, Orthodontic and Orthopedic Treatment in the Mixed Dentition, Needham Press, January 1993. pp.347-353.	
	82	MOERMANN et al., "Computer Machined Adhesive Porcelain Inlays: Margin Adaptation after Fatigue Stress," IADR Abstract 339, <i>Journal of Dental Research</i> , vol. 66(a) (1987), p. 763.	
	83	MÖRMANN et al., "Marginal Adaptation von adhasiven Porzellaninlays in vitro, "Schwizerische Monatsshrift fur Zahnmedizin, Vol. 85 (1985), p. 1118-1129.	
	84	NAHOUM, "The Vacuum Formed Dental Contour Appliance" The New York State Dental Journal, 30(9):385-390, Nov. 1964.	
	85	NASH, "CEREC CAD/CAM Inlays: Aesthetics and Durability in a Single Appointment," Dentistry Today, (October 1990), pp. 20, 22-23, 54.	
	86	NISHIYAMA et al., "A New Construction Of Tooth Repositioner By LTV Vinyl Silicone Rubber" J. Nihon University School of Dentistry, 19(2):93-102, 1977.	
1	87	PINKHAM, "Foolish' Concept Propels Technology," Dentist, Jan./Feb. 1989, 3 pages total.	
1	88	PINKHAM, "Inventor's CAD/CAM may transform dentistry," Dentist, Sept. 1990, 3 pages total.	
1/11_	89	PONITZ," Invisible Retainers", Am. J. Orthodontics, Vol. 59, No. 3, March 1971, pp. 266-272.	

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EXAMINER: relial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

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1/10	90	Procera Research Projects, PROCERA Research Projects 1993 — Abstract Collection, 1993, pp. 3-24.	
1	91	REKOW, "A Review of the Developments in Dental CAD/CAM Systems,"(contains references to Japanese efforts and content of the papers of particular interest to the clinician are indicated with a one-line summary of their content in the bibliography), Dental Clinics: Prosthodontics and Endodontics, pp.25-33, 1992.	
	92	REKOW, "CAD/CAM in Dentistry: A Historical Perspective and View of the Future," Journal, Vol. 58 No. 4, (April 1992), pp. 283, 287-288.	
	93	REKOW, "Computer-Aided Design and Manufacturing in Dentistry: A Review of the State of the Art," The Journal of Prosthetic Dentistry, Vol. 58, No. 4 (Oct. 1987), pp. 512-516.	
	94	REKOW, "Dental CAD-CAM Systems: What is the State of the Art?" Journal of the American Dental Assoc., Vol. 122 (1991), pp. 43-48.	
	95	REKOW, "Feasibility of an Automated System for Production of "Dental Restorations," PhD Thesis, Univ. of Minnesota, Nov. 1988, 244 pages total.	
	96	RICHMOND et al., Research Reports, "The Development of a 3D Cast Analysis System," British Journal of Orthodontics, Vol. 13, No. 1, (January 1986) pp. 53-54.	
	97	RICHMOND, "Recording The Dental Cast In Three Dimensions," Am. J. Orthod. Dentalac. Orthop., Vol. 92, No. 3, (Sept. 1987), pp.199-206.	
	98	RUDGE, "Dental arch analysis: arch form, A review of the literature," European Journal of Orthodontics, Vol. 3, No. 4 (1981), pp.279-284.	
	99	SAKUDA et al., "Integrated information-processing system in clinical orthodontics: An approach with use of a computer network system," Am. J. Orthod. Dentofac. Orthop. Vol. 101 No. 3 (March 1992), pp. 210-220.	
	100	SCHELLHAS et al., "Three-Dimensional Computed Tomography in Maxillofacial Surgical Planning," Arch Otolamgol Head Neck Surg. Vol. 114 (April 1988), pp. 438-442.	
1	101	SHILLIDAY, "Minimizing finishing problems with the mini-positioner" Am. J. Orthod. 59:596-599, 1971	
	102	Siemens, "CEREC - Computer-Reconstruction, "High Tech in der Zahnmedizin, 14 page total.	
1	103	Sirona Dental Systems GmbH, CEREC 3D, Manuel utilisateur, Version 2.0X (in French), 2003, 114 pages total.	
///	104	STOLL et al., "Computer-aided Technologies in Dentistry" (Article Summary in English, article in German), Dtsch Zehnärztl Z 45, 314-322, 1990.	Π

Examiner Signature	Date Considered	12-1-09

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M	105	U.S. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Melville NY, October 1977, 20 pages total.	
	106	U.S. Department of Commerce, National Technical Information Service, "Holodontography: An Introduction to Dental Laser Holography," School of Aerospace Medicine Brooks AFB Tex, March 1973, 37 pages total.	
	107	U.S. Provisional Patent Application No. 60/050342, filed on June 20, 1997, 41 pages total.	
	108	VAN DER LINDEN et al., "Three-Dimensional Analysis of Dental Casts by Means of the Optocom," J Dent Res, July-August 1972, Vol. 51, No. 4, p. 1100.	
	109	VAN DER LINDEN, "A New Method to Determine Tooth Positions and Dental Arch Dimensions," July-August 1972, p. 1104.	
	110	VAN DER ZEL, "Ceramic-fused-to-metal Restorations with a New CAD/CAM System," Quintessence International, vol. 24(11) (1993), pp. 769-778.	
	111	VÁRADY et al., "Reverse engineering of geometric modelsan introduction. Computer- Aided Design, 29 (4):255–268, 1997.	
	112	WARUNEK et al., "Clinical use of silicone elastomer appliances" JCO, MH (10):694-700, 1989.	
	113	WARUNEK et al., "Physical And Mechanical Properties of Elastomers In Orthodontic Positioners" Am. J. Orthod. Dentofac. Orthop., 95:388-400, 1989.	
	114	WELLS, "Application of the Positioner Appliance in Orthodontic Treatment" Am. J. Orthodont., 58:351-366, 1970.	
	115	WILLIAMS, "Dentistry and CAD/CAM: Another French Revolution, "Journal of Dental Practice Admin., Jan./March 1987, pp. 2-5.	
	116	WILLIAMS, "The Switzerland and Minnesota Developments in CAD/CAM," Journal of Dental Practice Admin., pp. 50-55, April/June 1987.	
	117	WISHAN, "New Advances in Personal Computer Applications for Cephalometric Analysis, Growth Prediction, Surgical Treatment Planning and Imaging Processing, " Symposium: Computerized Facial Imaging in Oral and Maxilofacial Surgery Presented on September 13, 1990, AAOMS 72nd Annual Meeting and Scientific Sessions, Sept. 13, 1990, New Orleans, Journal of Oral and Maxillofacial Surgery, Vol. 48, no. 8, Supp. 1, August 1990, p. 5.	
TIN	118	YAMAMOTO et al., "Three-Dimensional Measurement of Dental Cast Profiles and Its Applications to Orthodontics," Annual Int'l Conf. of IEEE Engineering in Medicine and Biology Society, Vol. 12, No. 5, pp. 2051-2053, 1990	

Examiner Signature	Date Considered	12-1-05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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****		D 10		Application Number	10/087,153	
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STAT	EMENT B	YA	PPLIÇANT	First Named Inventor	PAVLOVSKAIA, ELENA	
				Art Unit	3732	
(4	(use as many sheets as necessary)			Examiner Name	MANAHAN, TODD E.	
Sheet	9	of	9	Attorney Docket Number	018563-002910US	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	т
111	110	YAMAMOTO et al., "Optical Measurement of Dental Cast Profile and Application to Analysis Of Three-Dimensional Tooth Movement in Orthodontics," Frontiers in Med. and Biol. Eng'g, Vol. 1, No. 2 (1988), pp. 119-130.	
110			

Examiner Date Considered \$ - 1 - 25

EXAMINER: Initial preference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, Include copy of this form with next communication to applicant.

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Substitute for form 1449A/PT Complete If Known 10/087,153 **Application Number** INFORMATION DISCLOSURE Filing Date February 28, 2002 STATEMENT BY PRELICANT PAVLOVSKAIA, ELENA **First Named Inventor** 3732 Art Unit (use as many sheets as necessary) Examiner Name MANAHAN, TODD E. Sheet of 018563-002910US **Attorney Docket Number**

			U.S. PATENT D	OCUMENTS+		
		Document Number				
Examiner Initiate	Cate No.1	Number (Gnd Code [®] (# Irrown)	Publication Date MM-00-YYYY	Name of Patarities or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	AA	2,467,432	04-19-1949	Kesting		
	AB	3,660,900	05-09-1972	Andrews		
	AC	3,860,803	01-14-1975	Levine	•	
	AD	3,916,526	11-04-1975	Schudy		
\top	AE	3,950,851	04-20-1976	Bergersen		
	AF	4,014,096	03-29-1977	Oellinger		
	AG	4,195,046	03-25-1980	Kesling		
7	AH	4,324,546	04-13-1982	Heltlinger et al.		
1	AJ	4,348,178	09-07-1982	Kurz		
1	N	4,478,580	10-23-1984	8amut .	· · · · · · · · · · · · · · · · · · ·	
1	AK	4,504,225	03-12-1985	Yoshii		
1	AL	4,505,673	03-19-1985	Yoshii		
1	AM	4,575,805	03-11-1986	Moermann et al.	·	
1	AN	4.611,288	09-09-1986	Duret et al.		
 	AO	4,656,860	04-14-1987	Orthuber et al.		
1	AP	4.663,720	05-05-1987	Duret et al.		
 	AQ	4.742,464	05-03-1988	Duret et al.		
1	AR	4.755.139	07-05-1988	Abbatte et al.		
1	AS	4.763.791	08-16-1988	Halverson et al.		
 	AT AT	4,793,803	12-27-1988	Martz		
 	AU AU	4.798.534	01-17-1989	Breads	·	
 	AV	4.837.732	06-06-1989	Brandestini et al.		
1	AW	4.850.864	07-25-1989	Diamond		
╂	AX	4.856.991	08-15-1989	Breads et al.		
1	AY	4,938,862	06-26-1990	Walker et al.		
 	AZ	4,937,928				
 	BA	——————————————————————————————————————	07-03-1990	van der Zei		
╁╌┤		4,964,770 4,975,052	10-23-1990	Steinbichier et al.		
+	BB	<u> </u>	12-04-1990	Spencer et al.		
1	BC	5,011,405	04-30-1991	Lemchen		
+	80	5,017,133	05-21-1991	Miura		
	BE	5,027,281	06-25-1991	Rekow et al.		
	BF	5,035,613	07-30-1991	Breads et al.		
	BG	5,055,039	10-08-1991	Abbatte et al.		
	BH	5,059,118	10-22-1991	Breads et al.		
	81	5,100,316	03-31-1992	Wildman		
	BJ	5,121,333	06-09-1992	Riley et al.		
	BK	5,128,870	07-07-1992	Erdman et al.		
	BL	5,131,843	07-21-1992	Hilgers et al.	<u> </u>	
	BM	5,131,844	07-21-1992	Marinaccio et al.		
M	BN	5,139,419	08-18-1992	Andreiko et al.		
	80	5,184,306	02-02-1993	Erdman et al.		
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MANAHAN, TODD E.	
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			Publication Data AMA-DD-YYYY	Name of Patentae or Applicant of Cited Document	Pages, Columns, Lines, Where Relevent Passages or Relevent Floures Appear
111 L	BP	5,186,623	02-16-1993	Breads et al.	
" NO	8Q	5,257,203	10-26-1993	Riley et al.	
Α	BR	5,273,429	12-28-1993	Rekow et al.	
-	BS	5,278,758	01-11-1994	Lemchen et al.	
	87	5,338,198	08-16-1994	Wu et al.	
	BU	5,340,309	08-23-1994	Robertson	
	BV	5,342,202	08-23-1994	Dashayes	
	BW	5,368,478	11-29-1994	Andreiko et al.	
	BX	5,382,164	01-17-1995	Stern	
	BY	5,395,238	03-07-1995	Andreiko et al.	
	BZ	5,431,562	11-11-1995	Andreiko et al.	
	CA	5,440,496	08-08-1995	Andersson et al.	
	CB	5,447,432	09-05-1995	Andersson et al.	
	CC	5,452,219	09-19-1995	Dehoff et al.	· · · · · · · · · · · · · · · · · · ·
	œ	5,454,717	10-03-1995	Andreiko et al.	
	CE	5,456,600	10-10-1995	Andreiko et al.	
	CF	5,474,448	12-12-1995	Andreiko et al.	
	ÇG	5,518,397	05-21-1996	Andreiko et al.	
	CH	5,533,895	07-09-1996	Andreiko et al.	
	CI	5,542,842	08-06-1996	Andreiko et al.	
	ü	5,549,476	08-27-1996	Stem	
	CK	5,587,912	12-24-1998	Andersson et al.	
	CL	5,605,459	02-25-1997	Kuroda et al.	
	CM	5,607,305	03-04-1997	Andersson et al.	
	CN	5,645,421	07-08-1997	Sloctsky	
	CO	5,655,653	08-12-1997	Chester	
	,CP	5,683,243	11-04-1997	Andreiko et al.	_
	CQ	5,733,126	03-31-1998	Andersson et al.	
Su.	CR	5,740,267	04-14-1998	Echerer et al.	
	CS	5,975,893	11-02-1999	Chishti et al.	

				FOREIGN PA	TENT DOCUM	ENTS	•	
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	· CT	EP	091,876	A1	10 10 1983	Duret		
		-63	299,490		01 18 1089	Otembichier et al.		
-		EP	376,873	<u> </u>	07-04-1990	Shafir		
	ew	E2-	490,848	81	06 17 1002	Anderssen et al.		
	CX	69	541,500	At	06 12 1008	Andersson et al.		1

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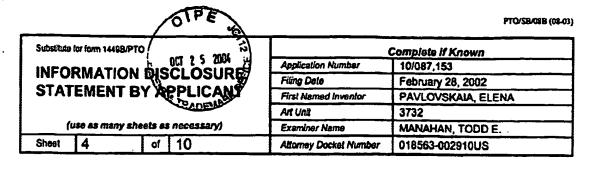
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				Art Unit	3732
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	FOREIGN PATENT DOCUMENTS							
Examiner Initiats*	Cite No.'	Country Code ³	reign Patent Oocu Number	ment	Publication Date MM-DD-YYYY	Name of Patentae or Applicant of Cited Document	Pages, Columns, Lines, Where Relevent Passages or Relevent Figures Appear	70
	Cr	59	731,873	-91	09-18-1998	Andersson et el-	7,000,000	
	77	460	774,033	-81	05-28-1997	Oden et al.	<u> </u>	
	DA	- F R	-2,652,256-	A\$	03-29-1991	Jourds		
	-08	-50-	2,303,020	A1	<u> 06 02 1078</u>	Suychiro-		
	-oc	wo -	90/08,512		00-09-1990	Lomoron-		
	90	WO.	91/04.713	A1	04-18-1991	Jourda et al.		U
	ÐΕ	wo	94/10,935	AY	05-26-1994	Androiko ot al:		
	-01	WO.	98/44 865		10-15-1998			
	00	-WO	98/58,596	AT	12-30-1998	Chishti et al.		ПП

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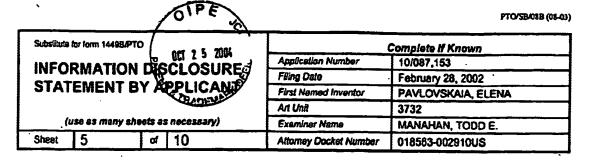
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, sedal, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	7
	ОН	ALEXCOVEER of et., The DigiGraph Work Station Part 2, Clinical Management, JCO (July 1990), pp. 402-407.	Γ
	ÐI-	ALTECHULER et al. "Laser Electro Optic Syciem for Rapid Three Dimensional (3D) Topugraphic Mapping of Surfaces." Optical Engineering, Vol. 20(6) (1981), pp. 053-064.	T
		ALTSCHULER at at, "Measuring Surfaces Space Coded by a Laser Projected Del Maldy," SPIE Languing Applications for Automated Industrial Inspection and Assembly, vol. 162 (1979), p. 187-191.	-
	- OK	ACTSCHULER at als. Analysis of 3-D Data for Comparative 3-D Serial Growth Pattern Studies of Graff Table Studies of Papers, Peb. 1975, Journal of Dental Research, Vol. 54, IADR Abstracts 1970, 1 pages lots).	
	OL	ALTSCHULER, "30 Mapping of Marillo Fadai Presthesis," AABR Abstract #607, 1980, 2 pages total.	
سبر	- OM	American Association for Dental Research, Summary of Activities, March 29-23, 1980, Los Angeles, OA, p. 165.	T
	DN	ANDERSCON of al., "Clinical Results with Yitanium Crowns Febricated with Machine Daplication and Speak Greater," Acta Odentalogical Geondinavia, vol. 47 (1989), pp. 379-286.	
	-00	BALIMRIND et al., "A stereophstogrammetric cyclem for the detection of prosthesic lessening in total hip arthreplesty, Applications of Furnam Biosterocmetrics (NATO)," Proceedings of the Society of Photo-Optical Instrumentation Engineers, Vol. 100, July 9-13, 1976; pp. 112-128.	
	-09	BAUMPIND et al., "Manning the Skull in 3.D. Replated from The Journal, Celifornia Buntal/ Association, Vol. 48, No. 3 (1972 Fell Issue) 11 pages total.	
		BALIMRIND et al., "Seminars in Orthodontics," Seminare in Orthodontics, Vol. 7, No. 4 (Dac. 2001); p. 222.	
	DR	PAUMRIND, 'A System for Coninfectal Mapping Through the Integration of Bata from Stores X Ray Tillins and Stores Photographs," An Invited paper submitted to the 1975 American Society of Photogram, Symposium on Close Range Photogram, Systems, University of III., Aug. 26. 20, 1975, pp. 1925.	
	DS	RAUMPIND, Integrated Three Dimensional Cranishalal Mapping: Background, Principles, and Pempertines; Seminers in Orthedentics, Vol. 7, No. 4 (Dec. 2001), pp. 223-232.	_
		BEGOLE et al., "A Computer System for the Analysis of Dental Casts," The Angle Orthodontict, Vol. 61 No. 3 (July 1981), pp. 258 259.	
		BERNARD et al., "Computerized diagnosis in Orthodontics for Epidemiological Studies" (progress- report), Abstracts of Papers, Journal of Centel Research; Vol. 71, Special Issue March 1-14, 1992, pp. 69-38.	
	- DV	BHATIA et al., "A Computer Aided Design for Orthographic Surgery," British Journal of Gral and Maxillotetial Surgery, Vol. 22 (1984), pp. 237-263	
	DW	BIGGERSTAFF et et., "Computerized analysis of occlusion to the postsonine dentition," American described Adherical Vol. 61, No. 3 (Nor. 1972), pp. 245-234.	

Examiner Date 12-6.04 Todd E. Manahan Signature Considered

EXAMINER: Initial it reterence considered, whether wild criticion is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of URF (arter of the process). Applicant is to place a check mark here if English tanguage Translation is attached.

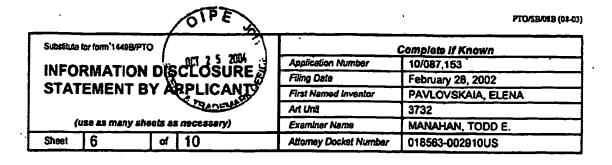


			TERATURE DOCUM		
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<u></u>	ОХ	No. 4 (Jan. 1070), pp. 28-36-	natic Sature and Simula	tions, The Angle Orthodorifiel, Vol. 40	Γ
	ny	BRANDESTINI et al. "Computer Mach Contal Geocarch, Vol. 84/Special Issue	ined Ceramic Inlays: In	Vitro Marcinal Adaptation * Journal of Abstracts 1005, 1 page total.	Γ
	DZ	BROOK of al., "An Image Analysis Syr Casts: Comparison with Manual Meas Bept of Children's Denticity and Ortho	prements of Mosto dista	Clemeter, Abstract of Pagers, 1995.	
	- E A	SURSTONE (Interview), "Dr. Charles of City (Interview), "Dr. Charles of Ci	i. Burstone on The Uses Hical Orthodonline, (Part	el the Computer in Orthodoniic 1) Vol. 8, No. 7 , July 1979; (Par 2)	
	69	RURSTONE et al., "Precision adjustment production Matter," Am. Journal of Orth	odonlics, Val. 19, No. 2	guel erch: Computer arch form (Feb. 1981), pp. 115.133.	
	5 C	GHACONAS et al., The DigiGraph Wo	як Station, Part 1, Besid	Concepts * ICO (time 1990), pp. 360-	
	ED	CHAFETZ et al., "Subsidence of the Fi	emoral Prosthesis, A Ste warch, No. 201 (Decemb	weephotogrammatric Evaluation." ber 1985), pp. 60-67.	
	EE	SHIAPPONE, Constructing the grating	Joyle setup and position	of J. Ciln. Orthod., 14:121-133, 1980.	
	EF	GOTTINGHAM, "Gnethologic dear pla	etic positioner Am. I.O.	dhod 55:23-31, 1969	
·	EG	CRAWFORD, "Computers in Dentistry:	3. The Computer Chro		
	EH		Office: Boss It Work?	Genedian Dantel Journal, Vol. 57, No. 2	
	EI	GROOKS *CAD/CAM Comes to USC;	USC Dentistry, (Opring	4900) pp. 14-1 7.	
	EJ	SURE TON: "Correcting mataligned ma 20:300-306, 1896.	ndibuler Inelcore with re	movable mininers" / Clin. Othed.,	
	ВK	CURRY et al., "Integrated Three Dimer destrumentation Laboratory/University C 2001), pp. 250-266.	of the Pacific," Seminars	in Orthodonilas, Val. 7, No. 4 (Dec.	
	а	Optimization and interaction with Copin Surgary, Vol. 77, No. 6 (June 1086), pp	alchiefric and CT-Based - 677-685.	Models," Flectic and Recenstructive	
	EM	DCS Dental AG. The CAD/CAM DCS Production AG. Jan. 1882, pp. 1-7.	Titen System' for Produ	ction of Growns/Bridges*-050	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	include name of the author (in CAPITAL LETTERS), tille of the article (when appropriate), title of the item (book, megazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	7
	-EN-	DEFRANCO at at., Three Dimensional Large Displacement Analysis of Orthodoniic Appliances, J. Biomeshanics, Vol. 9 (1976), pp. 793-884.	
	50	Demai Institute University of Zurich Suitzedand, Program for International Symposium on Computer Moderatures, State of the Art of the CEREC-Method, May 1991: 3 person total	
	EP	BoliTrae Corporation, Destirat document, pp. 4-18.	
	EQ	*Catrett et at *CAD GAM in Dentistry." Journal of the American Dental Association, Vol. 117 (Nov 1999), pp. 715-720."	
	ER	DURET of al., *GAD/CAM trasging in dentistry, *Current Opinion for Dentistry, Vol. 1 (1991); pp. 159-	
	-63-	SURST, "The Denial CAD/CAM, General Description of the Project," Hennson International Product— Brochure, Jan. 1986., 18 pages total	
	ET_	DURIET, Vers une prosthese informatises, (English translation also attached), Tonue, vol. 75, (Nov. 15, 1986), ep. 55-57.	
	EU	ECONOMIDES, "The Microcomputer in the Orthodontic Office," JCO, (Nov. 1979), pp. 767-772-	
	EV	SLSASSER, "Some observations on the history and uses of the Kesting positioner" Arn. J. Onthou., 96:368-374, 1956.	-
	- EM	FABER of al., "Computerized Interactive orthodontic treatment planning," Am. J. Orthod., Vol. 73, No. 1- (331-1978), pp. 36-48.	
	EX	Journal of Orthodootice and Dentufacial Orthopeatics, Vol. 92, No. 8 (Dec. 1907), pp. 476-483.	
	EY	FRIEDE et al., "Accuracy of Cephalemetric Prediction in Orthognathic Surgery, "Abstract of Pepero," Jeumel of Contal Research, Vol. 70 (1987), pp. 754-769.	
	-62	GIM ALLDENT Deutschland, "Dae DUX System: Ole Technik" 4 pages total.	
	FA	GRAYSON, "New Mathods for Three Bimensional Analysis of Craninfacial Deformity," Symposium: Communicated Facial Imaging in Oral and Marihofacial Surgery, AAOMS Cept. 18, 1990, 3 pages total.	
	F8	GUSSS et al., *Committer Treatment Estimates in Orthodontics and Orthogratistic Surgery, "JCO- (April, 1989), pp. 202-28:-	
	FC	HEAVEN et at., "Computer-based image Analysis of Artificial Reet Surface Garles," "Automated Isonification of Landmarks in Caphalometric Rediographs," Abstracts of Papers, Journal of Dantais Automater, Vol. 67, March 9-13, 1988, 2 pages total.	-

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STATEMENT BY APPLICANT First Named Inventor PAVLOVSKAIA, ELENA	1
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Sheet 7 of 10 Attorney Docket Number 018563-002910US	

		NON PATENT LITERATURE DOCUMENTS	
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	FD	Procedures: (Article Summary in English, article in German), Informationen, (March 1991), pp. 375-	Γ
	£E	998. HUCKINS, "GAD CAM Concreted Mandibular Medal Protetype from MRI Date," AAOMS 1999, p. 96.	H
	FF	Inside the ADA, Journal Cl' The American Sental Assoc., Vol. 118 (March 1989) 9 pages total.	l
	FG	460 Interviews, "Craig Andreixo", DOS, MS on the Elan and Ordios Systems", JCO, (Aug. 1994), pp. 469-468.	
	FH	JCO totandova, "Dr. Harner W. Phillips on Computers in Orthodonile Practice, Part 2," JCO, (Dec. 1983), pp. 840-831.	T
_	FI	dErettico, "The problem, electronic data transmission and the law," AJO-DO. (Aur. 1989), 59, 476-479.	
	Fd	JONES et al., "An Assessment of the Fit of a Parabulic Curve to Pre- and Post-Treatment Dental Avenue," Entire Journal of Orthodomics, Vol. 16 (1989), pp. 65-83.	
	-FK-	KANADA et el., "Case reports on both positioners using LTV viry! silicone rubber" d. Nihon University sandr of Bentistry, 26(1):11-29, 1891.	T
	Я	KAMADA et al., "Construction of tooth positioners with LTV strut ellicone rubber and some case reports" J. Nihon University Suriou of Dentisity, 24(1): 1-27, 1982:	
	FM	KANAZAWA et et., "Three Bimensional Measurements of the Occlusal Surfaces of Upper Moters In.e. Dutah Fopulation," J. Dont Res., Vol. 63, No. 11 (Nov. 1984), pp. 1298-1301.	l
	_EN	KESLING, "Goordinating the predetermined pattern and tooth positioner with conventional treatment." Am. J. Oathod. Oral. Surp., 32:285-293, 1845.	T
	FO	KESLING, The philosophy of the tooth positioning appliances Am. J. Onthod. Cirol. Surg., 31(8):397-604, 1943.	
	FP	MLEEMANN et al., "The speed positioner" J. Clin. Orthod., 38:678-688, 1998.	T
	FQ	-KHROOA of al., "Three-dimensional dental cast analyzing system using laser ecerning" Am. J. Outhed. Dentales. Orthop., 110:303-309, 1990.	
	FR	LAURE NOPAU et al., "A Computer Vicien Technique for the Acquisition and Processing of 3-8. Profiles of Bental Imprints: An Application in Organocordes," IEEE Transactions on Medical Imaging, Vol. 10, No. 3 (Sept. 1991), pp. 453-461.	
	- 52	LEINFELDER et et., "A new method for generating ceramic restorations: a GAD CAM system," dourne! Of The American Deuter Assoc. Vol. 448, No. 6 / km. 1989), no. 703-703.	H

Examiner Signature	Todd E. Manahan	Date Considered	12-6-04
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw tine through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

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of 10

Sheet

Complete if Known				
Application Number	10/087,153			
Filing Date	February 28, 2002			
First Named Inventor	PAVLOVSKAIA, ELENA			
Art Unit	3732			
Exeminer Name	MANAHAN, TODD E.			
Attorney Docket Number	018563-002910US			

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
·	FT	MGNAMAROA et al., Orthodontic and Orthopodic Treatment in the Mixed Dentition, Neudinam Press; Tampay 1888, pp.347-335.	
	fU-	Mic/OutAfrix et al., "Invisible Retainers", J. Clinical Orthodontics, (August 1985) pp. 670-678	Γ
_	FV	MOERMANN et al., Computer Machined Adhesive Porosizin Inlays: Margin Adaptation offer Patigue- Strees," NOR Abetreet 339, Journal of Deptet Research, vol. 66(a) (1987), p. 339	
	PW	MORMANN et et., "Marginet Adaptation von adhashen Perzellanintays in vitro, "Schwizerleche Meneteshiik fur Zehnmedizin, Vol. 85 (1985), p. 1118-1129.	T
	FX	MORMANN et al., "Marginale Adaptation von adhäsuven Purzettaninleye in vitre," Separatdruck eus: - Bohwetz, Mischir, Zahnuned, 95, 1110, 1985.	
	_FY-	NAHOUM, The vacuum formed dental contour appliance* The New York State Bental Journal, 20(0):285-200, Nov. 1054.	
	FZ	NASH, "CEREG GAB/CAM Injuys: Application and Durability in a Single Appeletment," Dantistry Foday, (October 1990), pp. 20, 22 23, 54-	
	GA	MISHIYAMA et al., "A new construction of tooth repositioner by LTV vinyt efficient rubber" J. Nihon— University School of Centisby, 19(2):83-102, 1973—	
	- 68	PINICHAM, "Feelich' Concept Propole Technology." Dentist, Jan IFeb. 1989, 3 pages total.	
	GC	PhylitiAM, "Inventor's CAD/CAM may beneform dentistry." Dentist. Sept. 1990. 3 pages total	
	-00	REPARTZ, Invisible Retainers, 60 Pers. J. Orthodontics, March 1971, pp. 208-2725	
_	GE	Projects Research Projects, PROCERA Research Projects 1995 — Abstract Collection, 1995, pp. 3-28.	
	GF	REKOW, "A Review of the Developments in Dentel GAD/CAM Systems." (contains references to Japaness efforts and content of the papers of particular laterast to the clinician are indicated with a one-line summary of their content in the bibliography), Dentel Glinico: Prosthodonlics and Endodonlics. on 25-33, 1992.	
	GG	BEXOW "CAD/CAM in Dentistor A Historical Perspective and View of the Future," Journal, Vol. 68— No. 4, (April 1992), pp. 783, 787-785.	
	GH	REKOW, "Computer Aided Design and Manufacturing in Dentistor A Review of the Sinte of the Art," The Journal of Prosthetic Dentistry, Vol. 58, No. 4 (Oct. 1987), pp. 512-518.	
	GI	-REKOW, "Dental GAD GAM Systems: What is the State of the Art?" Journal of the American Dental Assoc; Vol. 122 (1991), pp. 43-49.	T

Examiner		Date	1
Signature	Todd E. Manahan	Considered	12-6-07

EXAMINER: Initial if reference of the first of the conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

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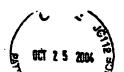
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Sheet	9	of	10	Attorney Docket Number	018563-002910US

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	- 03	RENOW, "Sessibility of an Autometed System for Production of "Dentel Renterations," RhD Thosis, UNIV. of Minnesota, Nov. 1988, 244 pages total.	
	-GK-	RightMOND et al., Research Reports, "The development of a 3D Cast Analysis System." Relieb Sourcet of Orthodontics, pp. 58-54.	Γ
	GL	RICHMOND: Recording the dental cast in three dimensions; Am. J. Orthod. Dentalsc. Orthop., Vol. 42, No. 3 (Sept. 1987), pp. 199, 208.	
	GM	SUDGE, Tiental arch analysis: srok form, A revisur of the literature," European Journal of Subscappe, Vol. 3, No. 4 (1084), pp.279-284.	
	GN	SAKUDA et al., "Integrated information processing system in clinical orthodonifes: An approach with- use of a computer notwerk system," Am. J. United Sentetes, Orthop. Vol. 101 No. 3 (March 1992),	
	· GO	SCHELLHAS et al. "Three-Dimensional Computer Tomography in Madilloladed Surgical Planning," Amb Citaturgol Head Nock Surg. Vol. 114 (April 1888), pp. 438-442.	H
		SECU at al., "Computer cided Defalametry and New Mechanics in Orthodentics" (Adicta Summary in	\vdash
	GP	English, article to German), Fortsohn Wolfarothop. 44, 970-970 (Nr. 5), 1883 SHILLIDAY, "Minimising finishing problems with the mini positioner" Arts V. Orthod. 39,380-399, 1974	L
	GO		
-	GR	Glemens, **CEREO - Computer-Reseasuraction, "Vigin Technin der Zahnungdizin, 14 page total?"	
	GS .	Sirone Dental Systems GmbH, GEREO 8D, Manuel villisatuur, Version 2.8X (in Franch), 2093, 172>	Г
	GT	STOLL et al., "Computer aided Technologies in Denticty" (Article Summary in English, article in Berman), Bleah Zahndrzif Z 45, 314-322, 1990.	
	GU	-W.C. Department of Commerce, National Technical Information Service, "Automated Crown Replication Using Solid Photography SM," Solid Photography Inc. Mahdila NY, October 1977, 21 seges total:	
	cv	W.S. Department of Commerce, National Technical Information Service, "Holodentegraphy: Arr Introduction to Dental Laser Holography," School of Aerospace Medicine Brooks AFS Tex, March 1978, 97 pages total.	
,	GW	W.G. Provisional Patent Application No. 80/050343, Red on June 20, 4007, 41 pages total.	
	GX	VAN BER LINDEN et al., Three-Dimensional Analysis of Dental Casts by Means of the Optocom "J Pent Res, July August 1972, p. 1101.	
	GY	WAN DER LINDEN, 'A New Method to Betermine Took Positions and Dental Arch Cimensions," July- August 1973, p. 1104.	

Signature Primary Examinar Considered /2-6-01	Examiner Signature	Todd E. Manahan Primacy Examinar	Date Considered	12-6-01
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		NON PATENT LITERATURE DOCUMENTS	
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		MAN DER ZEL, "Commis fund to motel Rectamitions with a New CAD/CAM System," Quintescence	
	GZ	International, vol. 24(11) (1093), pp. 709-770:	
•	1	VARADY et al., "Reverse Engineering of Cosmotric Models - As Introduction," May 19, 1998, se. 4.	
	HA	28	
	 	WARLINEK At at., "Glinical use of stiticone disstance appliances" JGO, MH (10):804-700, 1905."	_
	HB		
	\vdash	WARUNSK of al., "Physical and mechanical properties of elastomers in orthodonic positioners" Are-	
	HC	G-Orthod-Quatofos-Orthop., 05:388-400, 1959.	
		WELLS Papilization of the positioner analizance in adhedentic treatment Am. J. Orthodoni. 59:351.	_
-	НО	365, 1019:	
		WilLLIAMS, "Dentistry and GAD/GAM: Another French Revolution, "Journal of Dental Practice Admin.,	
-	₩ E -	J371,71(2-1) 1087, pp. 3-5.	
		WILLIAMS, The Suitzedand and Minnersta Developments in CAD/CAM," Journal of Contal Practice	_
	HF	Admin., pp. 55 55, Aprilliums 1087.	
	_	WISHAN, New Advances in Personal Computer Applications for Cooksismetric Analysis, Conudb.	_
	HG	Prodiction, Surgical Treatment Planning and Imaging Processing, "Sympostum: Computerized Patial	
		Integring the Orol and Maxifotacial Surgery, AAGMS, Sept. 19, 1990, p. 5.	
		YAMAMOTO ct at., Three Dimensional Measurement of Dental Cast Profiles and its Applications to	
_	нн	Orthodontics," Annual Int'l Cord. of IEEE Engineering in Mediane and Biology Society, Vol. 12, No. 5, apr-2081-30\$3, 1000-	
	\vdash	VANAMOTO at al., "Optical measurement of dental cast profile and application to analysis of three-	_
	. на	dimensional tooth movement for unsodurities. Promises in kind, and Siol. Eng. Q. Vo. 1. No. 2119881.	
		59. 110 130	

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